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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,519	01/23/2004	Dong-Hoon Lee	2557-000210/US	5356
30593 7590 03/03/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER FOTAKIS, ARISTOCRATIS	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 03/03/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/762,519

Applicant(s)

LEE ET AL.

Examiner

ARISTOCRATIS FOTAKIS

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05/02/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 8, 10 - 19 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 – 8 and, 11 - 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terasawa et al. (US Pub 20030147365).

Re claims 1, 5, 13 and 14, Terasawa teaches of an integrated cell searcher (Fig.3 and Fig.4, Paragraph 0039) comprising: a first code generator (#430, Fig.4 and Fig.6) which generates first codes (*PN codes*) for cell searching in a non-synchronous mode (W-CDMA, Paragraphs 0046 and 0055); a second code generator (#430, Fig.4 and Fig.6) which generates second codes (*PN codes*) for cell searching in a synchronous mode (cdma2000, Paragraphs 0046 and 0055); a signal selector which receives the first codes and the second codes, and selectively outputs either of the first codes or second codes, in response to a mode selection signal (Paragraph 0055, Lines 15 – 18) and then buffers the selected code (#610 - #640, Fig.6); and a plurality of correlators (#420, Fig.4) which receive and correlate a code from a base station (#410, Fig.4) and the selected codes (#430, Fig.4), respectively (Paragraph 0063, Lines 10 – 12).

However, Terasawa discloses the claimed invention except for buffering both the first codes and the second codes and then selecting the code in response to a mode selection signal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have buffered the first and second codes before

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selection where it would have been functionally equivalent with buffering the code after selection, since it has been held that rearranging parts of an invention involved only routine skill in the art. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

Re claims 2, 6 and 17, Terasawa teaches of the first codes, second codes and code from the base station are pseudonoise (PN) codes (Paragraph 0055).

Re claims 3, 11 and 15, Terasawa teaches of each of the plurality of correlators further comprising: a despreader (#720, Fig.7) which despreads the code received from a base station (#710, Fig.7) and the codes output from the signal selector (#430, Fig.4 and Fig.7) and outputs a despreading result (Paragraph 0061); a synchronization accumulative register which receives signals from the despreader, accumulates the received signals in synchronization with a clock signal, and stores an accumulation result (#940, Fig.9) (coherent accumulator, Paragraph 0065); an energy converter (#450, Fig.4 and Fig.9) which converts a signal output from the synchronization accumulative register into an energy signal (Paragraph 0050); and a non-synchronization accumulative register (#460, Fig.4 and Fig.11) which accumulates signals output from the energy converter and stores an accumulation result (Paragraph 0095).

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Re claims 4, 12 and 16, Terasawa teaches of a peak detector (#470, Fig.4 and Fig.12) which receives correlation results from the correlators and identifies which among the selected codes (#1210 - #1240, Fig.12, Paragraphs 0101 - 0102) yielded the best correlation and outputting a detection result (#480, Fig.4 and #1350, Fig.13, Paragraph 0104).

Re claims 7 and 19, Terasawa teaches of the first mode corresponds to UTMS and the second mode corresponds to CDMA (Paragraphs 0046 and 0055).

Re claim 8, Terasawa teaches of the plurality of correlators are caused to perform cell searching for the first communication mode or the second communication mode depending on whether the first codes or the second codes are selected by the signal selector (Paragraph 0055).

Re claim 18, Terasawa teaches of the first mode is a non-synchronous mode (WCDMA) and the second mode is a synchronous mode (CDMA2000) (Paragraph 0046).

Allowable Subject Matter

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed February 5, 2008 have been fully considered but they are not persuasive.

Applicants submit that Terasawa does not teach the limitation of a buffer used to buffer the first and second codes before selection. Furthermore, Applicants submit that the Examiner did not provide motivation from the prior art for making the proposed rearrangement of parts. Accordingly, the Examiner's assertion that a rearrangement of parts involves only routine skill in the art is insufficient on its own to establish a finding of obviousness.

As discussed above on independent claims 1, 5, 13 and 14, Terasawa teaches of buffering either the first code or second code after selection. One of ordinary skilled in the art at the time the invention was made would have recognized that rearranging the buffer elements either before or after the selector would have been functionally equivalent, thus producing the same result.

One of the key points of the Supreme Court Decision in *KSR vs Teleflex Inc* 550 U.S.-, 82 USPQ2d 1385 (2007) was that when an examiners findings of fact are based on, for example, official notice, common sense, design choice or ordinary ingenuity, a mere statement that a particular claim limitation is design choice is not adequate. Examiners must provide an explanation as to why the difference between the prior art and the claimed invention would have been obvious to one skilled in the art (Dann v. Johnston, 425 U.S.219, 189 USPQ 257 (1976 and Leapfrog Enterprices, Inc. v. Fisher-Price, Inc—F.3d--,82 USPQ2d 1687 (Fed.Cir.2007)).

In this case, a motivation is not required because buffering the signal before or after selection of the code does not change the output. Therefore, a reasoning was given by the Examiner were rearranging the buffers with the selectors is functional equivalent. Either you have the buffers after the selectors or the buffers before the selectors that would have provided the same results. The buffers are just storing information and cannot alter the procedure or process of the circuitry. Therefore, that could have been a designer's preference or option on which order to place the selectors and the buffers.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristocratis Fotakis whose telephone number is (571) 270-1206. The examiner can normally be reached on Monday - Thursday 7 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aristocratis Fotakis/

Examiner, Art Unit 2611


CHIEH M. FAN
SUPERVISORY PATENT EXAMINER